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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,800	12/07/2001	Jae-Duck Lee	678-706 (P9742)	7307

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EXAMINER

DOAN, KIET M

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,800

Applicant(s)

LEE, JAE-DUCK

Examiner

Kiet Doan

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is response to amendment file on 08/19/2005.

Response to Arguments

1. Applicant's arguments filed 08/19/2005 have been fully considered but they are not persuasive.

In response to applicant's argument in claim 1, 3 and 7 that reference fail to teach searching FAs of adjacent stations **excluding a base station currently engaged in communication with said mobile communication terminal**.

Examiner respectively disagrees, and further cited in Soliman (Patent No. 6,321,090) teach searching FAs of adjacent stations **excluding a base station currently engaged in communication with said mobile communication terminal** (C4, L22-66, C7, L40-67, C8, L1-31, Fig.1 Illustrate current base station engaged in communication is read on No.18 (source base station) means as excluding base station when mobile unit No.26 move to second cell No.24 and drop link No.28 means as hard handoff performing and mobile unit will not perform hard handoff back to the same base station No.18).

Therefore, examiner interpreted searching FAs of adjacent stations **excluding a base station currently engaged in communication with said mobile communication terminal** is as broadest reasonable interpretation and it is proper.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Soliman (Patent No. 6,321,090).

Consider **claims 1 and 4**, Soliman teaches a method for performing a hard hand-off in a cellular mobile communication system (Title), the method comprising the steps of: setting an area of services covered with a frequency assignment (FA) unavailable to adjacent stations to be a boundary cell (C7, L12-51, Fig.3, No.84 (f1), No.86 (f2) as area of services covered with a frequency assignment, No.88 as boundary cell); entering into the set boundary cell by a mobile communication terminal during communication (C7, 39-50, Fig.3, No.26, Illustrate mobile station/terminal entering into boundary cell); and searching FAs (C3, L5-15, teach tracking signals means as searching FA) of adjacent stations excluding a base station currently engaged in communication with said mobile communication terminal so as to determine a target FA, with which the mobile communication terminal is to perform the hard hand-off (C4, L23-55, C7, L40-67, C8, L1-31, Fig.1, Illustrate No.20 as adjacent stations excluding a base station currently engaged in communication and No.18 as current engaged in communication with mobile terminal No.26, and wherein No.18 drop source link 28 and

new link No.34 is form which means mobile communication terminal handoff to determine a target as No.20).

Consider **claims 2 and 5**, Soliman teaches the method of claim 1, wherein the target FA is determined by the mobile communication terminal through searching common FAs of adjacent stations to perform the hard hand-off therewith (C7, L51-67, C8, L1-23, Fig.2, No.48 teach selector tracking mobile terminal means as searching common FAs of adjacent stations as f1/f2 to perform the hard hand-off therewith).

Consider **claims 3 and 6**, Soliman teaches the method of claim 2, wherein determination of the target FA includes a step of recognizing that the mobile communication terminal is currently engaged in communication in the boundary cell (C3, L5-22, C4, L31-40, teach tracking signal when mobile within the determined are which means as determination of the target FA includes a step of recognizing mobile currently engaged in communication in the boundary cell), and commanding the mobile communication terminal to search FAs of the adjacent stations excluding the base station currently engaged in communication with said mobile communication terminal by means of a base station controller (BSC), which controls the hand-off of the mobile communication terminal (C4, L23-55, C7, L40-67, C8, L1-31, Fig.1, No.12, Illustrate MSC which contain base station controller for controls the hand-off of the mobile communication terminal).

Consider **claim 7**, Soliman teaches a method for performing a hard hand-off in a cellular mobile communication system including at least two base stations for providing a mobile communication terminal with services by having service areas that share at least one FA and can be overlapped, and a base station controller (BSC) for controlling the hand-off of the mobile communication terminal (C4, L23-55, Fig.1, No.36 as FA overlapped, No.12, Illustrate MSC which contain base station controller for controls the hand-off of the mobile communication terminal), the method comprising the steps of: setting an area of services covered by an FA unavailable to adjacent stations to be a boundary cell (C7, L12-51, Fig.3, No.84 (f1), No.86 (f2) as area of services covered with a frequency assignment, No.88 as boundary cell); connecting communication with a first sector and a second sector by a softer hand-off while the mobile communication terminal moves from the first sector to the second sector of the base station currently engaged in communication with said mobile communication terminal (C1, L55-57, C4, L45-50 teach soft hand-off); recognizing the second sector to be the boundary cell (C3, L15-28 teach tracking signal which can recognizing the second sector to be the boundary cell), and commanding the mobile communication terminal to search common FAs of the adjacent stations, except the base station currently engaged in communication, by the BSC; searching common FAs of the adjacent stations by the mobile communication terminal in response to the command, and reporting the searched results to the BSC; determining a target FA, with which the BSC is to perform the hand-off by using the searched results if conditions for performing the hard hand-off are satisfied; and performing the hard hand-off with the determined target FA by

disconnecting the communication with the first sector and the second sector from the mobile communication terminal under a command of the BSC (C4, L23-55, C7, L40-67, C8, L1-31 Fig.1, Illustrate No.20 as adjacent stations excluding a base station currently engaged in communication and No.18 as current engaged in communication with mobile terminal No.26, and where No.18 drop source link 28 and new link No.34 is form which said mobile communication terminal so as to determine a target FA as No.20 and terminal under a command of the BSC as No.14).

Conclusion

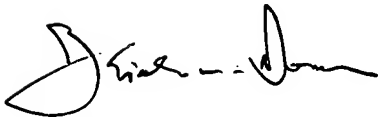
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kiet Doan
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